Targeting Zero Infections: Infection Prevention and Control at Outpatient Dialysis

A micro-webinar series for fellows: section 3

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Speakers

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2nd Year Nephrology Fellow

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School of Medicine
Introduction

Dr. Pujar is a senior nephrology fellow. After graduation, he will be joining a group practice.

He plans to see patients at two outpatient dialysis facilities.

After 1 year, he is expected to assume the Medical Director role at one of the facilities.

He would like to learn about infection prevention and control practices and his responsibilities as a medical director.
During in-hospital rotations, Dr. Pujar has seen many dialysis patients with serious infections and deaths from infectious complications.

He would like to learn how best to prevent infections at outpatient dialysis. Specifically, he wishes to determine how to reduce hospitalizations and prevent adverse outcomes, including deaths.

He asks, “when I admit a patient to outpatient dialysis, how can I ensure the patient will be safe, and effective infection control practices will be implemented?”
Objectives

Dr. Pujar would like to know:

1) What should he do to prevent infections as a medical director and nephrologist?

2) How can he help the patients and dialysis team prevent infections?

3) Where could he find helpful resources and tools?
Individual Responsibilities

1) Know the basics of infection prevention and control

2) Adhere to best practices at all times

3) Learn about each facility and get involved

4) Be an effective leader
Infection Prevention and Control Best Practices

1. Past knowledge and experience
2. National expert bodies (click links)
   - Centers for Disease Control and Prevention
   - Making Dialysis Safer (MDS) Coalition
   - Nephrologists Transforming Dialysis Safety
3. State HAI (Healthcare-Associated Infection) resources (click for listing of locations)
   - State-based HAI Prevention | HAI | CDC
4. New and updated information
   - Publications/guidelines
   - Meetings/conferences and memberships
CDC Dialysis Safety Homepage

https://www.cdc.gov/dialysis/index.html
Making Dialysis Safer (MDS) Coalition Homepage

https://www.cdc.gov/dialysis/coalition/index.html
Nephrologists Transforming Dialysis Safety Homepage

https://epc.asn-online.org/projects/ntds/

Online Learning Modules
NTDS: A Curriculum to Achieve Zero Preventable Infections
Managing Infections in an Outpatient Dialysis Facility
State HAI Program Homepage

https://www.cdc.gov/hai/state-based/index.html
1. Past knowledge and experience
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1. Clean vs. dirty

2. Hand Hygiene

3. Proper PPE use

Find links here

https://www.cdc.gov/handhygiene/providers/guideline.html
https://www.cdc.gov/hai/pdfs/ppe/PPE-Sequence.pdf
Learning About Each Dialysis Facility

1. Meet dialysis facility leaders
   Medical Director, Clinic Manager, Charge Nurse

2. Get to know your dialysis team
   Nurses, PCTs, Dietician, Social Worker etc.

3. Participate actively in Quality Assessment and Performance Improvement (QAPI) Meetings
Review of Dialysis Facility Data

1. QAPI minutes
2. Past survey findings
3. Self-audit results
4. NHSN survey reports
5. Policy & procedures
6. Communication with other healthcare systems to capture culture results, reasons for hospitalizations, etc.
Culture of Safety – A Team Effort

Establish safety as a key goal for the facility

Evaluate errors as potential “system failures”

Develop processes for root cause analysis

Engage dialysis team in developing action plan

Commit needed resources (time and technology)

Patient/Care Partner Empowerment

Conversation Starter to Prevent Infections in Dialysis Patients

Preventing infections is important for patient safety. The Centers for Disease Control and Prevention (CDC) wants dialysis patients and dialysis centers to start a conversation about preventing infections. Family members can also start the conversation. We hope this guide can be a starting point to improve awareness about patient safety issues.

How does this facility involve patients and their families in infection control activities? Are patients encouraged to speak up when they see a concerning practice (for example, a staff member who does not wash her hands)?

Dialysis centers should educate and empower patients to help prevent infections and support a safe care environment. Talk to your social worker or facility administrator for ideas on how you can get involved.

How does this facility make sure that all patients receive necessary vaccines to prevent illness (such as Hepatitis B, seasonal flu, and pneumococcal vaccines)?

Patients on dialysis have weakened immune systems and should get certain vaccines to keep from getting sick.

Find links here

https://www.cdc.gov/dialysis/patient/speak-up-video.html
https://www.cdc.gov/dialysis/pdfs/MDSC_QA_Final_508_2_sm.pdf
CMS Conditions for Coverage for ESRD

Part II

Department of Health and Human Services

Centers for Medicare & Medicaid Services

42 CFR Parts 405, 410, 413 et al.
Medicare and Medicaid Programs;
Conditions for Coverage for End-Stage Renal Disease Facilities; Final Rule
Infection Prevention and Control Assessment Tool for Hemodialysis Facilities

This tool is intended to assist in the assessment of infection control programs and practices in dialysis facilities. In order to complete the assessment, direct observation of infection control practices will be necessary. To facilitate the assessment, health departments are encouraged to share this tool with facilities in advance of their visit.

Dialysis facilities that report to NHSN complete an *Outpatient Dialysis Center Practices Survey* each year. The survey responses can be accessed in NHSN or the facility can be asked to retrieve and print their completed NHSN survey in advance of the site visit. The elements included on this assessment tool are intended to complement the NHSN survey. For facilities that do not report to NHSN, consider asking the facility to complete the practice elements of the survey.

**Overview**

**Section 1: Facility Demographics**

**Section 2: Infection Control Program and Infrastructure**

**Section 3: Direct Observation of Facility Practices**

**Section 4: Infection Control Guidelines and Other Resources**

**Infection Control Domains for Gap Assessment**

1. Infection Control Program and Infrastructure
Infection Prevention and Control Assessment Tool for Hemodialysis Facilities

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I. Infection Control Policies and Infrastructure, continued

<table>
<thead>
<tr>
<th>Elements to be assessed</th>
<th>Assessment</th>
<th>Notes/Areas for Improvement</th>
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</thead>
<tbody>
<tr>
<td>7. Are there signs posted in patient areas within the facility that encourage patients to take an active role in and express their concerns about facility infection control practices?</td>
<td>○ Yes ○ No</td>
<td>○ Visually confirmed</td>
</tr>
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*Visual confirmation suggested.*

*Note: Look for signs in the facility that encourage patients to speak up and actively report infection control problems. Consider if the facility encourages active patient engagement in other ways.*
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Section 4: Infection Control Guidelines and Other Resources

Check the boxes next to the guidelines/resources recommended for the facility as a result of this assessment.

☐ Infection prevention resources for dialysis settings: http://www.cdc.gov/dialysis/

☐ Relevant guidelines: http://www.cdc.gov/dialysis/guidelines/index.html

☐ CDC Recommendations for Preventing Transmission in Chronic Hemodialysis Patients: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5005a1.htm

☐ Prevention tools, including checklists and audit tools: http://www.cdc.gov/dialysis/prevention-tools/index.html

Find links here: https://www.cdc.gov/infectioncontrol/pdf/icar/dialysis.pdf
Audit Tools and Checklists

1. Catheter Care Tools
2. Catheter Exit Site Care Tools
3. AV Fistula & Graft Cannulation and Decannulation Tools
4. Dialysis Station Disinfection Tools
5. Injection Safety Tools
6. Hand Hygiene Tools

Find links here: https://www.cdc.gov/dialysis/prevention-tools/audit-tools.html
# Audit Tools and Checklists

## An Example

### Checklist: Arteriovenous fistula/graft cannulation

- Clean site with soap and water
- Perform hand hygiene (staff)
- Put on new, clean gloves
- Apply skin antiseptic and allow it to dry
- Do not contact site (after antisepsis)
- Insert needles aseptically
- Connect to blood lines aseptically
- Remove gloves
- Perform hand hygiene

### CDC Dialysis Collaborative

Day: M W T H T S F  Shift: 1st 2nd 3rd 4th  Observer: Location within unit:

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**Audit Tool: Arteriovenous fistula/graft cannulation observations**

(Use a “✓” if action performed correctly, a “Ø” if not performed. If not observed, leave blank)

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Site cleaned with soap and water</th>
<th>Hand hygiene performed (staff)</th>
<th>New, clean gloves worn</th>
<th>Skin antiseptic applied appropriately</th>
<th>Skin antiseptic allowed to dry</th>
<th>No contact with fistula/graft site (after antisepsis)</th>
<th>Cannulation performed aseptically</th>
<th>Connect to blood lines aseptically</th>
<th>Gloves removed</th>
<th>Hand hygiene performed</th>
<th>Comments</th>
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</table>

**Discipline:** P=physician, N=nurse, T=technician, S=student, O=other

**Duration of observation period =** ______ minutes  **Number of procedures performed correctly =**

**Total number of procedures observed during audit =** ______

**ADDITIONAL COMMENTS/OBSERVATIONS:**

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Medical Director Extra Roles & Responsibilities

Part II

Department of Health and Human Services

Centers for Medicare & Medicaid Services

42 CFR Parts 405, 410, 413 et al.
Medicare and Medicaid Programs;
Conditions for Coverage for End-Stage
Renal Disease Facilities; Final Rule

§ 494.150 Condition: Responsibilities of the medical director.

Thank you!